Vacation work for Freshers in EP and PPL (Summer 2021)

During the first term (Michaelmas) all students reading Psychology (EP and PPL) will study an Introduction to Psychology. In the first term this includes two courses; (i) Social and Developmental Psychology, and (ii) Perception.

Social & Developmental Psychology

Have a look at the following textbooks:

Social psychology

Hewstone, M., Stroebe, W., & Jonas, K. (Eds.) (2015), An introduction to social psychology (6th edn.). Chichester: Wiley-Blackwell.

Smith, J., & Haslam, S. A. (Eds.) (2017). *Social psychology: Revisiting the classic studies* (2nd edition). Sage.

Developmental psychology

Slater, A. & Bremner, J. G. (2011). An introduction to developmental psychology (2nd Edition, but the first edition would be fine too). Oxford: BPS Blackwell.

Slater A. M., & Quinn P. C. (2012). *Developmental psychology: Revisiting the classic studies.* Sage.

Smith P. K., Cowie, H. & Blades, M. (2011). Understanding Children's Development (5th Edn., earlier editions are fine) Oxford: Blackwell.

Try an essay (up to 1500 words)

Discuss the limitations of Milgram's research on obedience in terms of providing a theory of why people commit acts of destructive obedience.

Perception

We will be almost exclusively talking about the visual system next term. The reading for this course is partly from lecture handouts but I would also strongly recommend the following text book which we will refer to in tutorials

"Sensation and Perception" (Ninth Edition) by E. Bruce Goldstein

Chapters 1-10

Have a go at the following essay (write no more than 1500 words):

"Describe the 'Perceptual Process' for the visual system. How does the structure of the eye underpin visual perception?"

Statistics and Probability

In addition, all Psychology students will also study a course on Statistics and Probability. The reading for this course is partly from lecture slides and handouts but also recommended reading includes

"Statistical Methods for the Social Sciences" by Alan Agresti & Barbara Finlay (Fourth Edition; published by Pearson).

I've attached a small stats problem sheet for you to have a look at! (see end of this document).

Then depending on which degree you are reading you will also have courses on Neurophysiology (for EP students) or Philosophy (PPL students)

Neurophysiology

For the first 4 lectures it is strongly recommended to look at the following textbook:

"Nerve and Muscle, 4th Edition." By Keynes, Aidley and Huang (Cambridge).

This will give you a good grounding for the start of the course.

Philosophy

See the Philosophy section in the PPE 2021 document on the website.

It is strongly recommended that you do start reading during the vacation before term starts for all of these courses. In addition, have a go at the essay questions in Psychology provided above.

The preparatory work for Probability Theory and Statistics

Exercise 1:

Write short notes on each of the following topics.

(a) Type I and Type II errors.

(b) the Binomial distribution.

(c) confidence limits.

(d) null and alternative hypotheses.

Exercise 2:

a) Explain briefly what is meant by saying that two events, A and B, are

(i) mutually exclusive;

(ii) independent.

b) In a certain population, one in three people has blue eyes. The probability of a blue-eyed person being left-handed is 1/7 and the probability of a non-blue-eyed person being left-handed is 1/5.

(i) What proportion of the population is left-handed?

(ii) What is the probability that a randomly-chosen person is blue-eyed and left-handed?

(iii) State, with reasons, whether the events of having blue eyes and being left- handed are independent.

Exercise 3:

(a) Define the mean, median, variance and standard deviation of a random sample.

In a study of children's false beliefs, Dowker et al. (2009) measured the non-verbal scores of children in three age-groups. The results are presented in the following table.

Age-group 1	Age-group 2	Age-group 3
7	10	1
10	11	6
10	11	7
10	12	9
10	12	10
11	12	10
15	13	10
16	13	12
16	15	12
18	15	14

b) Plot the data and comment.

c) Using a suitable parametric test and a suitable non-parametric test, determine whether the scores of the three age-groups differ significantly. State the assumptions and hypotheses for each test.

d) State your practical conclusion.